



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/587,694

07/27/2006

Thomas Metz

2004DE102

7037

25255

7590

05/25/2011

CLARIANT CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
4000 MONROE ROAD  
CHARLOTTE, NC 28205

EXAMINER

WARD, PAUL V

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

05/25/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/587,694	METZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	PAUL V. WARD	1624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-6 & 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

**STATUS OF THE CLAIMS**: Claims 1-9 and 11 are pending in this application.

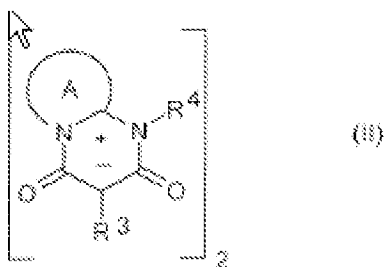
### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrichsen (Heterocycles'1982.) in view of Matyjas et al. (AUTEX Research, Journal VOL. 3, No. 2'2003).

Applicant claims compounds and a composition comprising said compound of formula II:



wherein all the variables are defined in the claims, as mesoionic pigments.

Friedrichsen discloses mesoionic compounds which are known as pigments and dyes. Friedrichsen does not disclose that dimerization using a phenylene bridge, which results in an improvement in color.

Applicant teaches mesoionic compounds as pigments employing dimerization using a phenylene bridge, resulting in an improvement in color.

Matyjas discloses, on page 91, phenylene bridges in dyes.

It would be obvious to modify the compounds of Friedrichsen by using a phenylene bridge as taught by Matyjas. One of ordinary skill in the art would have been motivated to modify the compounds of Friedrichsen to prepare the corresponding compounds and composition by Applicant, with reasonable expectation of obtaining the compound and composition comprising the phenylene bridge. Such modification of the compound would have been obvious to the skilled chemist because the skilled artisan would have had the reasonable expectation of obtaining the compounds and composition.

Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

2. Claims 1-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrichsen (Heterocycles'1982) in view of Hurter et al. (5,663,309).

Friedrichsen discloses mesoionic compounds which are known to as pigments and dyes. Friedrichsen does not disclose that dimerization using a phenylene bridge, which results in an improvement in color.

Applicant teaches mesoionic compounds as pigments employing dimerization using a phenylene bridge, resulting in an improvement in color.

Hurter teaches phenylene bridges in dyes. (See columns 1-5).

It would be obvious to modify the compounds of Friedrichsen by using a phenylene bridge as taught by Hurter. One of ordinary skill in the art would have been motivated to modify the compounds of Friedrichsen to prepare the corresponding

Art Unit: 1624

compounds and composition by Applicant, with reasonable expectation of obtaining a the compound and composition comprising the phenylene bridge. Such modification of the compound would have been obvious to the skilled chemist because the skilled artisan would have had the reasonable expectation of obtaining the compounds and composition.

Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

***Allowable Subject Matter***

3. Claims 7-9 are in condition for allowance. The process in Claims 7-9 were not found to be obvious nor anticipated by the prior art of record. Thus, the prior art does not teach or suggest the presently claimed process. Therefore, these claims are allowed.

***Conclusion***

Claims 1-6 and 11 are rejected in this application. Claims 7-9 are allowed.

Art Unit: 1624

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL V. WARD whose telephone number is (571)272-2909. The examiner can normally be reached on M-F 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/PAUL V WARD/**

**Primary Examiner, Art Unit 1624**